RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number:	_/o/784,633A
Source:	IFWO
Date Processed by STIC:	10/18/04

ENTERED



IFWO

RAW SEQUENCE LISTING

DATE: 10/18/2004 TIME: 10:01:23

PATENT APPLICATION: US/10/784,633A

Input Set : A:\pto.pg.txt

```
3 <110> APPLICANT: SHIRAI, Tomoyuki
        ASAMOTO, Makoto
         HOKAIWADO, Naomi
 7 <120> TITLE OF INVENTION: Carcinogen-hypersensitive rat
 9 <130> FILE REFERENCE: 671302-3004
11 <140> CURRENT APPLICATION NUMBER: 10/784,633A
12 <141> CURRENT FILING DATE: 2004-02-23
14 <150> PRIOR APPLICATION NUMBER: JP P2001-253241
15 <151> PRIOR FILING DATE: 2001-08-23
17 <150> PRIOR APPLICATION NUMBER: JP 2001-253241
18 <151> PRIOR FILING DATE: 2001-08-23
20 <160> NUMBER OF SEQ ID NOS: 6
22 <170> SOFTWARE: PatentIn Ver. 2.1
24 <210> SEQ ID NO: 1
25 <211> LENGTH: 1485
26 <212> TYPE: DNA
27 <213> ORGANISM: Rattus norvegicus
29 <220> FEATURE:
30 <221> NAME/KEY: CDS
31 <222> LOCATION: (32)..(883)
33 <400> SEQUENCE: 1
34 cgcagtgcca gggaggtgtg aatgaggcag g atg aac tgg aca ggt cta tac
                                      Met Asn Trp Thr Gly Leu Tyr
36
                                                                      100
38 acc ttg ctc agt ggc gtg aat cgg cat tct aca gcc att ggc cga gta
39 Thr Leu Leu Ser Gly Val Asn Arg His Ser Thr Ala Ile Gly Arg Val
                                15
42 tgg ctg tcc gtc atc ttt atc ttc aga atc atg gtg ctg gtg gct
43 Trp Leu Ser Val Ile Phe Ile Phe Arg Ile Met Val Leu Val Val Ala
44
        25
                                                                      196
46 gca gag agc gtg tgg ggt gat gag aag tct tct ttc atc tgt aac acc
47 Ala Glu Ser Val Trp Gly Asp Glu Lys Ser Ser Phe Ile Cys Asn Thr
                        45
                                            50
50 ctc cag ccg ggc tgt aac agc gtc tgc tat gac cat ttt ttc ccc atc
                                                                      244
51 Leu Gln Pro Gly Cys Asn Ser Val Cys Tyr Asp His Phe Pro Ile
                                        65
                    60
54 tcc cat gtg cgc ctg tgg tcc ctg caa ctc atc ttg gtt tcc acc cca
                                                                      292
55 Ser His Val Arg Leu Trp Ser Leu Gln Leu Ile Leu Val Ser Thr Pro
                                    80
                75
58 gct ctc ctc gtg gca atg cac gtg gct cac caa cac ata gaa aag
59 Ala Leu Leu Val Ala Met His Val Ala His Gln Gln His Ile Glu Lys
                                95
62 aaa atg cta cgg ctt gag ggg cac ggg gac ccc ctt cac ctg gaa gag
```

RAW SEQUENCE LISTING DATE: 10/18/2004
PATENT APPLICATION: US/10/784,633A TIME: 10:01:23

Input Set : A:\pto.pq.txt

```
63 Lys Met Leu Arg Leu Glu Gly His Gly Asp Pro Leu His Leu Glu Glu
      105
                           110
66 gta aag agg cac aag gtg cac atc tca ggg aca ctg tgg tgg acc tat
                                                                      436
67 Val Lys Arg His Lys Val His Ile Ser Gly Thr Leu Trp Trp Thr Tyr
                       125
                                           130
                                                                      484
70 gtc atc agt gtg gtg ttc cgg ctg ctg ttt gag gct gtc ttc atg tat
71 Val Ile Ser Val Val Phe Arg Leu Leu Phe Glu Ala Val Phe Met Tyr
74 qtc ttc tat ctq ctc tac ccq qqc tat gcc atq gtg cgg ctg gtc aag
                                                                      532
75 Val Phe Tyr Leu Leu Tyr Pro Gly Tyr Ala Met Val Arg Leu Val Lys
               155
                                   160
78 tgt gag gcc ttc ccc tgc ccc aac acg gtg gac tgc ttc gtg tcc cgc
                                                                      580
79 Cys Glu Ala Phe Pro Cys Pro Asn Thr Val Asp Cys Phe Val Ser Arg
           170
                               175
82 ccc act gag aaa acc gtc ttc act gtc ttt atg ctc gcc gcc tcc ggc
                                                                      628
83 Pro Thr Glu Lys Thr Val Phe Thr Val Phe Met Leu Ala Ala Ser Gly
                           190
86 atc tgc att atc ctc aac gtg gcg gag gtg gtg tac ctc atc atc cgg
                                                                      676
87 Ile Cys Ile Ile Leu Asn Val Ala Glu Val Val Tyr Leu Ile Ile Arg
88 200
                       205
                                           210
90 ged tgt ged ege egt get dag ege ege ted aat deg ded ted ege aag
                                                                      724
91 Ala Cys Ala Arg Arg Ala Gln Arg Arg Ser Asn Pro Pro Ser Arg Lys
                                       225
                   220
94 ggc tcg ggc ttc ggc cac cgc ctc tca cct gaa tac aag cag aat gag
                                                                      772
95 Gly Ser Gly Phe Gly His Arg Leu Ser Pro Glu Tyr Lys Gln Asn Glu
96
               235
98 atc aac aag ctg ctg agc gag cag gat ggc tct ctg aaa gac ata ctg
                                                                      820
99 Ile Asn Lys Leu Leu Ser Glu Gln Asp Gly Ser Leu Lys Asp Ile Leu
                                255
                                                     260
102 cgc cgc agt cct ggc act ggg gcc ggg ctg gct gag aag agc gac cga
                                                                       868
103 Arg Arg Ser Pro Gly Thr Gly Ala Gly Leu Ala Glu Lys Ser Asp Arg
                            270
                                                275
106 tgc tca gcc tgc tga tgccgagtac caggcaacct cccatccaac ccctccetca
                                                                       923
107 Cys Ser Ala Cys
108 280
110 ccccacccag gcctgcccct ccttctccta tgctggtgag caggcctctg cctcctaggg 983
112 attactccat caaacettcc ctccctccct actccccttc ctcagagagt cttctgtcaa 1043
114 agacetggee ggettgggag tggggageea ettetgeace agggeteaag gttattgagg 1103
116 gtgtgggcaa ttctttctgc ctataccctt tcctcttccc tctccctgag atgagggatg 1163
118 agatgttctg aaggtgtttc caattaggaa acgtaatctt aacccccatg ctgtcaggta 1223
120 ccccactttg ggagtcatgt cagtggggag ggctgtgagc aagcagagtg gaggaggggc 1283
122 tetgeactgt ggatggagaa gggaggggag ettgeettge tgeetgetae aaggaaaagg 1343
124 aggacacatc tagggtgggg gagttctgga gggagaagca ggcagataaa tcagagtggg 1403
126 ggttggtcag ggctgccccc agtccccagt tcccaaggcc tctctctctg aaaatgttac 1463
                                                                       1485
128 acattaaaca qqattttaca qt
131 <210> SEQ ID NO: 2
132 <211> LENGTH: 283
133 <212> TYPE: PRT
134 <213> ORGANISM: Rattus norvegicus
```

RAW SEQUENCE LISTING DATE: 10/18/2004
PATENT APPLICATION: US/10/784,633A TIME: 10:01:23

Input Set : A:\pto.pg.txt

```
136 <400> SEQUENCE: 2
    137 Met Asn Trp Thr Gly Leu Tyr Thr Leu Leu Ser Gly Val Asn Arg His
                                             10
    139 Ser Thr Ala Ile Gly Arg Val Trp Leu Ser Val Ile Phe Ile Phe Arg
                                         25
    141 Ile Met Val Leu Val Val Ala Ala Glu Ser Val Trp Gly Asp Glu Lys
                                                         45
                                     40
                35
    143 Ser Ser Phe Ile Cys Asn Thr Leu Gln Pro Gly Cys Asn Ser Val Cys
    145 Tyr Asp His Phe Phe Pro Ile Ser His Val Arg Leu Trp Ser Leu Gln
                                                 75
                             70
    147 Leu Ile Leu Val Ser Thr Pro Ala Leu Leu Val Ala Met His Val Ala
                                             90
    149 His Gln Gln His Ile Glu Lys Lys Met Leu Arg Leu Glu Gly His Gly
                                        105
                   100
    151 Asp Pro Leu His Leu Glu Glu Val Lys Arg His Lys Val His Ile Ser
                                    120
                                                        125
    152 115
    153 Gly Thr Leu Trp Trp Thr Tyr Val Ile Ser Val Val Phe Arg Leu Leu
                                135
                                                   140
            130
    155 Phe Glu Ala Val Phe Met Tyr Val Phe Tyr Leu Leu Tyr Pro Gly Tyr
                            150
                                                155
    157 Ala Met Val Arg Leu Val Lys Cys Glu Ala Phe Pro Cys Pro Asn Thr
                                            170
                        165
    159 Val Asp Cys Phe Val Ser Arg Pro Thr Glu Lys Thr Val Phe Thr Val
                                        185
                                                             190
                    180
    161 Phe Met Leu Ala Ala Ser Gly Ile Cys Ile Ile Leu Asn Val Ala Glu
                                    200
                195
    163 Val Val Tyr Leu Ile Ile Arg Ala Cys Ala Arg Arg Ala Gln Arg Arg
                                215
                                                    220
    165 Ser Asn Pro Pro Ser Arg Lys Gly Ser Gly Phe Gly His Arg Leu Ser
                                                 235
                            230
    166 225
    167 Pro Glu Tyr Lys Gln Asn Glu Ile Asn Lys Leu Leu Ser Glu Gln Asp
                        245
                                            250
    169 Gly Ser Leu Lys Asp Ile Leu Arg Arg Ser Pro Gly Thr Gly Ala Gly
                                        265
           260
    171 Leu Ala Glu Lys Ser Asp Arg Cys Ser Ala Cys
                275
                                    280
    176 <210> SEQ ID NO: 3
    177 <211> LENGTH: 21
    178 <212> TYPE: DNA
    179 <213> ORGANISM: Artificial Sequence
    181 <220> FEATURE:
    182 <223> OTHER INFORMATION: Artificial insertion sequence obtained from
digestion of a plasmid
              moiety
    185 <400> SEQUENCE: 3
                                                                           21
    186 catcatcacc atcaccattg a
    189 <210> SEQ ID NO: 4
    190 <211> LENGTH: 20
    191 <212> TYPE: DNA
```

RAW SEQUENCE LISTING DATE: 10/18/2004
PATENT APPLICATION: US/10/784,633A TIME: 10:01:23

Input Set : A:\pto.pg.txt

192	<213> ORGANISM: Artificial Sequence	
194	<220> FEATURE:	
195	<223> OTHER INFORMATION: PCR primer P1	
197	<400> SEQUENCE: 4	
198	aacgtggcgc aggtggtgta	20
201	<210> SEQ ID NO: 5	
202	<211> LENGTH: 20	
203	<212> TYPE: DNA	
204	<213> ORGANISM: Artificial Sequence	
206	<220> FEATURE:	
207	<223> OTHER INFORMATION: PCR Primer P2	
209	<400> SEQUENCE: 5	
210	atggtgatgg tgatgatggc	20
213	<210> SEQ ID NO: 6	
214	<211> LENGTH: 21	
215	<212> TYPE: DNA	
216	<213> ORGANISM: Artificial Sequence	
218	<220> FEATURE:	
219	<223> OTHER INFORMATION: PCR Primer P3	
221	<400> SEQUENCE: 6	
222	gggaaggttt gatggagtaa t	21

VERIFICATION SUMMARY

DATE: 10/18/2004

PATENT APPLICATION: US/10/784,633A

TIME: 10:01:24

Input Set : A:\pto.pg.txt